

METHOD AND APPARATUS FOR A FILE FORMAT FOR
STORING SPREADSHEETS COMPACTLY

ABSTRACT

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The present invention provides a method and apparatus for a file format for storing spreadsheets compactly on PDAs. PDAs only contain a limited amount of computer memory due to their small size and processing ability. To reduce memory constraints caused by PDA spreadsheet applications, the present invention focuses on reducing memory allocated for file storage. This is accomplished by optimizing the compression of individual spreadsheet files within a database record storage system. This method and apparatus of the present invention reduces the overall storage of spreadsheets within a spreadsheet program. The invention uses a collection of records to represent a spreadsheet file. In one embodiment, the invention stores spreadsheet file data in a first record. A second record stores access data of the spreadsheet file and cell data is stored on third or more records. The property data includes name, version, date information, and default cell format information of the spreadsheet file. Access data includes the number of columns accessed by the record and the cell IDs of the cells in the accessed columns. The third and other records each store a subset of the columns identified in the second record and the cell data includes the number of cells stored in the record and the data of the cells. Thus, the file format for compact storage utilized in an embodiment of the present invention creates additional memory that leads to significant improvements of performance within a spreadsheet application.

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